

NEW RECORDS OF TREE FERNS FROM VENEZUELA

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Trichipteris steyermarkii Tryon (1972) was originally described from specimens collected by the senior author from the cloud-forested summits of Cerro de Humo and Cerro Patao, in the Peninsula of Paria, Estado Sucre, Venezuela, at altitudes of 1200–1300 meters. This portion of northeastern Venezuela is noteworthy for its endemic as well as relict flora. In addition to the numerous species known only from Trinidad and/or Tobago which are isolated here in these cloud forests, there are also significant elements of the flora which manifest an affinity with the Guayana-Amazonian region of southern Venezuela (Steyermark & Agostini, 1966, Steyermark, 1974, 1979). In some cases the same species, known elsewhere in southern Venezuela from the Guayana-Amazonian portion, is isolated on these cloud-forested summits, while in other instances the taxon has become differentiated into another species. In the present example, *Trichipteris steyermarkii* has become clearly isolated and separated from its closest relative, *T. sagittifolia* of Trinidad (Tryon, 1972) by the loss of bullate scales on the lower surface of the pinnules and by the absence of long slender spines at the base of the petiole.

During 1978 the junior author collected *T. steyermarkii* from Margarita Island, just north of continental South America. This is an interesting extension of range and is the second collection thus far known. The data for this collection, which was identified by Dr. Rolla Tryon, are as follows: Edo. Nueva Esparta: Isla de Margarita, La Sierra, Cerro Copei, alt. 900 m, selva húmeda, November 20, 1976, *Francisco Ortega 253* (GH, La Salle, VEN).

Cyathea arborea (L.) Sm., according to the latest revision of the genus by Tryon (1976), is a species of the Greater and Lesser Antilles. However, a specimen purported to have been collected from "Caracas", Venezuela by Bredemeyer, was indicated as the type of *Cyathea serra* Willd. (1810). The latter was placed in synonymy under *C. arborea* by Tryon, who stated that "The species is not known from Venezuela. The specimen may have been obtained from a cultivated plant, or more likely from Puerto Rico where Bredemeyer visited before going to Venezuela." Vareschi (1969) included *Cyathea arborea* in his treatment of the ferns for the Flora of Venezuela, but

actually did not see any material of the species, stating "No pude encontrar ni una muestra en los herbarios examinados." On the basis of personal communication with Dr. Tryon, the species was omitted from the Flora of Avila (Steyermark & Huber, 1978), since Brede-meyer's "Caracas" locality was considered as an unlikely record.

In 1978 the junior author collected plants identified by Dr. Tryon as *Cyathea arborea* from Margarita Island, Venezuela, just north of continental South America. This specimen, thus, becomes the first authentic record for the species from Venezuela. The flora of Margarita Island manifests intimate affinities with that of the Greater and Lesser Antilles. Many taxa from the Antilles reach their southernmost limits of dispersal on Margarita Island, and are not known to extend farther south to continental South America. Such an example is found in the rubiaceous *Guettarda scabra* (L.) Lam., known from southeastern United States, Mexico, Central America, the Antilles, and south to Margarita Island, Venezuela. Actually, Margarita Island is geologically part of the Coastal Cordillera of northern Venezuela.

The data for the new Venezuelan collections are: Edo. Nueva Esparta: Isla de Margarita, La Sierra, Cerro Copei, alt. 800–900 m, 20 November, 1976, *Francisco Ortega 254*, "helecho arborescente de 5 m de altura, creciendo a orillas de la carretera, en sitios expuestos" (GH, La Salle, VEN).

In his revision of *Cyathea* (1976), Tryon states that "*Cyathea arborea* typically grows in montane forests, in humid ravines, along water courses and on mountain slopes, from sea level to 1200 m, usually 500–800 m. It frequently persists in cutover land, along forest border and in forest clearing. It is successful as pioneer species, often becoming established in disturbed habitats such as landslides, road cuts and spill and on abandoned lands."

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VENEZUELA

A LEMON-SCENTED PYCNANTHEMUM (LAMIACEAE)

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Every botanist with field experience in northeastern North America will agree that the crushed leaves of the mountain mints (*Pycnanthemum spp.*) give off an unmistakable and perhaps unique odor. The odor remains a reliable diagnostic character for plants in the vegetative stages. It was, therefore, with some considerable surprise that we encountered a plant of *Pycnanthemum virginianum* that gave off an odor indistinguishable from that of a squeezed lemon—and not unlike *Melissa officinalis*. A cursory sample of other plants in this population, scattered over ca. 1.5 hectares, revealed several others that gave the citrus odor while the majority still yielded the familiar mountain mintiness. The two odors are so startlingly different and distinctive that we believe it is worthwhile to propose the following intraspecific taxon:

***Pycnanthemum virginianum* f. *citriodora* forma novum.** TYPUS: *Sørensen, Muller, & Matekaitis 7711A*; sandy sphagnous meadow at Pine Rock Preserve, 4 mi E of Oregon, Illinois, along Ill. highway 64; 27 August 1978. (Holotype: DEK!; Isotypes: DEK!)

Omnino *P. virginiani* simule, odore citroso autem differt.

The lemon-scented character occurs among several taxa of the Lamiaceae. We referred above to the Common Balm, *Melissa officinalis*, often called Lemon Balm. One can also cite *Monarda citriodora*, a plant of the southern plains of the U.S. and adjacent Mexico. However, we have found only one other intraspecific taxon representing a lemon-scented variant of an otherwise non-lemon-scented species, notably the common garden herb, *Thymus serpyllum* var. *citriodora*. We describe this new taxon at the rank of *forma* rather than that of *varietas* so as to lay emphasis on the fact that its occurrence so far as we know is limited to a mutation that has taken place in a single population. We have checked at random a token representation of *Pycnanthemum virginianum* populations in northern Illinois without finding a recurrence of the mutation. We welcome information from other workers in the field on whether populations elsewhere exhibit this variability.

Grieve (1931) reports that Prairie Bergamot (*Monarda citriodora*)